REMARKS

Claims 1-27 are currently pending in the present application and are presently under consideration. All pending claims with status identifiers are at pages 2-9.

Applicants' representative acknowledges with appreciation the Examiner's indication that claims 4, 8-13, 15-20, and 24-27 would be allowable if recast in independent form to recite all limitations of respective base claims and any intervening claims. However, it is believed such amendments are not necessary in view of the deficiencies discussed *infra* of the cited art *vis a vis* applicant's claimed invention.

Favorable reconsideration is requested in view of the comments below.

I. Rejection of Claims 1-3, 5-7, 14, and 21-23 under 35 U.S.C. §103(a)

Claims 1-3, 5-7, 14, and 21-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tjandrasuwita, *et al.*(US Patent 5,422,654) in view of Hicok, *et al.* (US Patent 5,559,533). Reconsideration and allowance of claims 1-3, 5-7, 14, and 21-23 is respectfully requested for at least the following reasons. Neither Tjandrasuwita, *et al.*, nor Hicok, *et al.*, individually or in combination, teach or suggest all the claim limitations of the subject invention.

> In order to establish a prima facie case of obviousness, the teaching or ***suggestion*** to make the claim modification ***must be found in the cited art,*** not based on the applicant's disclosure. *In re Vaeck,* 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Furthermore, the mere fact that the reference can be modified does not render the modification obvious unless the cited art also suggests the desirability of the modification. *In re Mills,* 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

In particular, neither Tjandrasuwita, *et al.* nor Hicok, *et al.* teach or suggest ***a hardware cursor adapted to selectively overlay a cursor image onto a first and second display portions*** as recited in independent claims 1, 5, and 21. The present invention as recited in these claims facilitates reduction of computational overhead associated with conventional software cursor display systems and methods utilized in dual scan displays. Dual scan displays provide faster refresh rates than conventional single scan displays by dividing the display region into two segments that are refreshed at substantially the same

time by utilizing separate data paths corresponding to each segment. The present invention as recited in these claims provides for a hardware cursor that can be displayed concurrently on both segments of the dual scan display (*e.g.*, a top portion of the cursor is overlaid in an upper segment of the dual scan display and a bottom portion of the cursor is concurrently overlaid in a lower segment of the dual scan display).

Tjandrasuwita, *et al.* discloses a method of generating a dual scan display including a first display region adjacent to a second display region, wherein the dual scan display facilitates display of a greater number of grey levels when compared with previous dual scan displays. The Examiner concedes that Tjandrasuwita, *et al.* does not teach or suggest a hardware cursor adapted to concurrently ***overlay... onto a first and second display portions*** of a dual scan display, and accordingly cites Hicok, *et al.*, which discloses a hardware cursor that can be effectuated *only in a single scan display*. Hicok, *et al.* discloses a hardware cursor in which an unused portion of Video RAM is utilized as cursor memory to store cursor information, wherein the hardware cursor is created in such a manner to minimize a number of gates and silicon required for implementation within *a single scan display*. A monitoring circuit is disclosed which determines location of the cursor on the screen, and thereafter manipulates pixels in the cursor location to display such cursor (*e.g.*, the color of the pixels is altered to display a cursor). *See* col. 5 lines 50-57 and col. 6 lines 1-44. Hicok, *et al.* further discloses that during instances the cursor is partially within a display segment and partially outside a display segment, an Edge Data Alignment Circuit 50 aligns the cursor completely within the display segment. *See* col. 4 lines 64-67 and Fig. 1.

Thus, combining Tjandrasuwita, *et al.* and Hicok, *et al.* does not produce the applicants' invention as recited in the subject claims. The display segments of a dual scan display operate as completely disparate displays, as each display segment receives display data from disparate data paths. Combining Tjandrasuwita, *et al.* and Hicok, *et al.* results in a hardware cursor that can be displayed only on a single display segment, as the Edge Data Alignment Circuit disclosed in Hicok, *et al.* would prevent display of a cursor on a second segment of a dual scan display (*e.g.*, when the cursor would desirably be transferred from the first segment to the second segment, the Edge Data Alignment Circuit would force the cursor to be fully displayed in the first segment). The Examiner

thus has extracted benefits disclosed in the specification of the subject invention to overcome problems associated with conventional methods (*e.g.*, utilizing a hardware cursor in conjunction with a ***dual scan display*** to eliminate software overhead). Applicant respectfully submits that this is an unacceptable and improper basis for a rejection under 35 U.S.C. §103, as one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention. *See In re Fine,* 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) (citations omitted).

Furthermore, the invention disclosed in Hicok, *et al.* teaches away from the present invention *via* providing the Edge Data Alignment Circuit in connection with positioning the hardware cursor. The Federal Circuit has held that teaching away from the art of the subject invention is a *per se* demonstration of lack of prima facie obviousness. *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988). As described *supra,* the Edge Data Alignment Circuit forces the entire cursor to be displayed within display segment, thereby prohibiting display of a hardware cursor concurrently on two disparate display segments as recited in the subject claims.

Moreover, in the Final Office Action dated May 2, 2003, the Examiner simply restated that *via* combining Tjandrasuwita, *et al.* and Hicok, *et al.,* all elements of the subject claimed invention are obtained (*e.g.*, a dual scan display and a hardware cursor utilized in a single-scan display). However, proof that the separate elements exist in the prior art is inadequate to establish obviousness. *See Arkie Lures Inc. v. Gene Larew Tackle Inc.*, 43 USPQ2d 1294, 1297 (Fed. Cir. 1997). The Federal Circuit has stated that the prior art items themselves must suggest the desirability and thus the obviousness of making the combination without the slightest recourse to the teachings of the patent or application. Without such independent suggestion, the prior art is to be considered merely to be inviting unguided and speculative experimentation which is not the standard with which obviousness is determined. *Amgen, Inc. v. Chugai Pharmaceutical Co. Ltd.*, 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991); *In re Laskowski*, 871 F.2d 115, 117, 10 USPQ2d 1397, 1398 (Fed. Cir. 1989); *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1532 (Fed. Cir. 1988); *Hodosh v. Block Drug*, 786 F2f at 1143 n. 5., 229 USPQ at 187 n. 4.; *In re Gordon,* 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1985). As the combination of Tjandrasuwita, *et al.* and Hicok, *et al.* cannot operate

effectively in a dual scan display (*e.g.*, a cursor could only be displayed in a single display segment, and the cursor could never be concurrently displayed on a first display segment and second display segment), there cannot be an independent suggestion to combine such references to create the present invention as recited in the subject claims.

Furthermore, Hicok, *et al.* would require substantial modification to operate in a dual scan display environment. However, if a reference is cited that requires some modification in order to meet the claimed invention or requires some modification in order to be properly combined with another reference and such a modification destroys the purpose or function of the invention disclosed in the reference, one of ordinary skill in the art would not have found a reason to make the claimed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). The invention of Hicok, *et al.* mitigates a need for additional RAM to store a hardware cursor by utilizing unused portions of Video RAM to store information relating to the cursor. The hardware cursor thus becomes a "virtual" hardware cursor, as memory is not dedicated for such cursor. However, two disparate blocks of Video RAM memory would be required to display a cursor in both segments of a dual scan display. Locating two such portions of unused memory may prove difficult without adding additional memory to the Video RAM, thus reducing the benefit of the invention disclosed in Hicok, *et al.* Furthermore, the Edge Data Alignment Circuit would require modification to enable partial display of the hardware cursor when overlaying disparate display segments. Making such modifications to Hicok, *et al.* would necessitate additional hardware as well as result in user inconvenience, as the cursor would disappear from at least one side of a display when such cursor is transferred outside of such display.

In view of at least the above, it is respectfully submitted that the rejection of independent claim 1 (and independent claims 5 and 21, which recite a substantially similar limitation) and dependent claims 2, 3, 6, 7, 14, 22, and 23, which respectively depend therefrom, be withdrawn.

II. Conclusion

The present application is believed to be condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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